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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,027	03/17/2004	Yukio Shoji	040122	3468

23850 7590 05/16/2007
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EXAMINER

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
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1723

MAIL DATE	DELIVERY MODE
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05/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/802,027		SHOJI ET AL.	
	Examiner		Art Unit	
	Joseph W. Drodge		1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims 4,5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 5, based on the filter arrangement of the figure 2 embodiment having inlet and outlet at the bottom of the filter housing, conflicts with independent claim 1 which is based on the filter arrangement of the figure 1 embodiment in which the inlet and outlet are at the top portion of the filter housing.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For independent claims 1 and 8, recitation of the fluid being directed in a taper-like fashion is not explicitly supported by pages 18-19 of the Specification, as alleged. Instead, the instant Specification states that the flow guide 5, itself is tapered. For independent claim 12, the Specification at pages 25-27 states that falling-off preventing element 31b, itself, traps foreign matter which has passed through element 31a, however does not support claiming of foreign matter being trapped between the elements. ***Hence both recitations constitute New Matter, it is required that the claims be amended so as to be commensurate with the Specification, or alternatively the New Matter deleted from the claims.***

Claims 4 and 5 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Specification lacks any support for dependent claims 4 and 5, since independent claim 1 and the dependent claims are based on different embodiments as shown in figures 1 and 2, respectively and there is no indication that features of the figure 1 embodiment can be combined with features of the figure 2 embodiment, especially to switch the top inlet and outlet of claim 1 to the bottom portion of the housing. It is emphasized that claim 1 requires structure to effect sprouting up of flow from the bottom portion of the inflow chamber (effected by instant guide element 7 (only present in the figure 1 embodiment having a top inlet 13c) while claims 4 and 5 require a bottom inlet (only present as inlet 25a or 25b of the figure 2 embodiment).

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stutzman patent 5,271,850.

Stutzman discloses [for claims 1 and 8] inflow chamber (space within lower portion of side wall of housing 11) communicating with inlet 7, outflow chamber 25 communicating with outlet 15, cylindrical filter element 20 (column 3, lines 52-63), baffle structure 16, see figure 3 arranged to create flow of at least a portion of the flow from the bottom portion of the inlet chamber to rise in a taper-like fashion towards the inside of the filter element portion or 1st guide to reverse the downward flow of incoming liquid and produce a rising flow of liquid (see also column 6, lines 51-68).

Regarding dependent claims: for claim 2, see inlet 7/37 in upper portion of inlet chamber; for claim 3, the bottom portion of baffle structure creates a narrowed cross-section between baffle and side wall of the filter housing (figure 3) ; for claim 4, see inlet 17' in bottom of the housing and also inlet/outlet 15'; for claim 5, the baffle structure forcibly guides the flow since it is solid and impermeable; and for claim 6, the baffle structure has a concave/convex stream-lined shape (figure 3).

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Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al patent 5,569,373.

Smith et al disclose inflow portion communicated with inlet 40, outflow portion communicating with outlet 70, and a composite filter element comprising target trapping, finer mesh size element 66, surrounded and supported by 'fall-off preventing' or relatively larger mesh size filter element 64, lining the side of the annular inflow chamber, which traps some of the solid impurities being filtered and thus prevents them from falling. Also, foreign matter of a size intermediate of the outer filter element and inner filter element inherently becomes trapped in between the elements (column 4, lines 48-59). ***When the quantity of trapped impurities reaches a given threshold, a signal is activated (column 6, line 55-column 7, line 12, etc.).***

For claim 11, Smith et al also teach a differential pressure sensor, whose details are extensively discussed at column 6, line 55-column 7, line 12 to alert of the filter element being clogged and needing cleaning.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7,9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stutzman in view of Budzich. These claims differ in requiring a differential pressure sensor to detect pressure differences between inflow chamber and outflow chamber. However, Budzich teaches a differential pressure sensor , whose details are extensively discussed at (Abstract, column 2, lines 35-41). It would have been obvious to have incorporated a differential pressure sensor of Budzich into the Stutzman oil filtering device, to ensure timely opening of the drain outlet in the bottom of the filter housing, to avoid entrainment of separated water and particles into the flow of oil fluid through the filter.

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin, can be reached at 571-272-1189. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

May 8, 2007


JOSEPH DRODGE
PRIMARY EXAMINER